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ADDITIONAL NOTES ON THE GENUS *GLARESIS*  
(COLEOPTERA: SCARABAEIDAE)

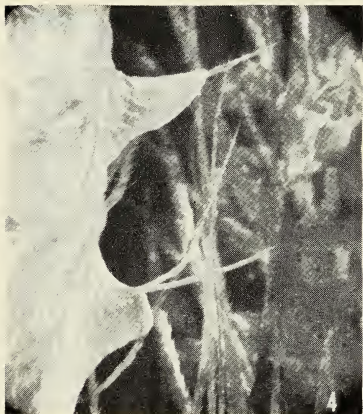
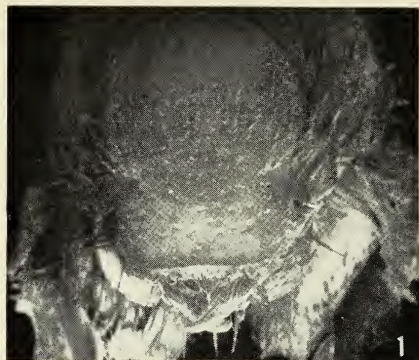
BY ROBERT D. GORDON

*Systematic Entomology Laboratory,  
Agricultural Research Service, USDA*<sup>1</sup>

Since the genus *Glaresis* was revised for the U. S. and Canada (Gordon, 1970), specimens have been examined that extend the known ranges of some species. The most interesting record is of a specimen of *G. ecostata* Fall collected by H. Howden at Angostura Dam, Hot Springs, South Dakota in July 1968, along with specimens of *G. canadensis* Brown and *G. inducta* Horn. The latter two species would be expected at that locality, but *ecostata* had previously been recorded only from California, Arizona and New Mexico. I collected another specimen of *ecostata* at Angostura Dam in August 1973. Specimens of *G. phoenicis* Fall have been examined from Mesquite, Nevada, and White Sands, New Mexico. *G. confusa* Brown was previously known only from the unique type (Gordon, 1970), but specimens from two additional localities have since been observed. The data on these specimens is as follows: Bull Creek, 5000', 15 mi. S Hanksville, Utah, VII-6-1968, A. T. Howden; Cochise Co., Arizona, 5 mi. N Benson, VII-26-1969, A. R. Hardy, F. G. Andrews, J. W. Smith. Of 15 *Glaresis* specimens from Benton, Mono Co., California, sent to me by Alan Hardy, 13 proved to be *G. medialis* Gordon, a species previously known only from Utah (Logan and Richfield) and Washington (Toppenish). The other two specimens are *G. clypeata* Van Dyke and *G. mendica* Horn. Hardy also sent four *Glaresis* specimens from another locality, these being the type material of the new species described below.

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<sup>1</sup> Mail address: c/o U. S. National Museum, Washington, D. C. 20560.



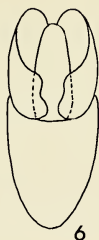


FIG. 6. *Glaresis arenata*, new species (holotype), ventral view of male genitalia.

The antenna of species of *Glaresis* has been recorded in the literature as having nine segments. In my 1970 paper I accepted this without examining the antenna myself. I am indebted to Paul Ritcher, Oregon State University, for calling my attention to the fact that *Glaresis* has ten-segmented antennae. I have personally confirmed this by examining the antenna of five species of *Glaresis*.

In addition to Dr. Ritcher, I wish to thank Alan Hardy, California Department of Agriculture, for the loan of specimens; Henry Howden, Carleton University, Ottawa, and E. C. Becker, CNC, Ottawa, for data obtained from specimens in their care.

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#### ***Glaresis arenata*, new species**

*Male*: Length 3.80 mm, greatest width 2.05 mm. Form elongate, widest posterior to middle of elytra. Color pale brownish yellow, head and pronotum slightly darker than elytron, reddish brown. Head smooth, extremely feebly tuberculate; anterior clypeal margin straight, distinctly

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FIGS. 1-5, *Glaresis arenata*, new species (paratype): 1, head; 2, apex of mesotibia; 3, teeth on posterosuperior margins of hind trochanter and femora; 4, enlarged view of teeth on posterosuperior margin of hind femora; 5, hind tibia.

marginated with traces of tubercles, anterior angle angulate, not toothed (Fig. 1); mandible slender, sinuate. Pronotum slightly more than half as long as wide; short, longitudinal carinae present except in impressions; surface nearly smooth, impressions feeble; lateral and posterior margins with fringe of coarse setae; a distinct fovea medially near lateral margin and a feeble, longitudinal, median impression present. Elytron smooth; interval nearly without costa, flat with tiny, widely interrupted remains of a costa present; sparsely pubescent. Mesotibia sinuate on outer margin, five spines present on outer margin from middle nearly to apex, projecting at apex (Fig. 2). Posterosuperior margin of hind trochanter with a single, large tooth near femur (Fig. 3); posterosuperior margin of hind femur with two small teeth (Figs. 3, 4). Hind tibia broadly triangular, a strong projection on outer margin medially, elongate tubercles irregularly scattered over surface, inner margin strongly pubescent (Fig. 5). Genitalia with apex of aedeagus rounded in ventral view (Fig. 6), curved upward in lateral view.

*Female*: Length 3.56 mm, greatest width 2.00 mm. Similar to male in external appearance.

*Type-material*: Holotype, male, sand dunes, 7 mi. SW Kelso, San Bernardino Co., California, IV-20-21-1969, fluorescent black light, M. S. Wasbauer and R. R. Pinger (USNM). Paratypes, three, same data as for holotype except one collected IV-16-17-1969 and one collected beating *Larrea divaricata*. Paratypes in collections of USNM, California Academy of Sciences and the collection of Alan Hardy, Sacramento, Calif.

*Variation*: Length 3.25 to 3.80 mm, greatest width 1.78 to 2.05 mm. The number of spines on the outer margin of the mesotibia varies from four to five, and one specimen of the type series had a feeble second tooth present on the posterosuperior margin of the trochanter.

*Remarks*: This species goes to couplet ten in the key to species (Gordon, 1970) and would key to *cartwrighti* Gordon. *G. arenata* differs from *cartwrighti* in having the apex of the aedeagus broadly rounded, the elytral intervals not distinctly costate, the teeth on posterosuperior margin of hind femur widely separated, the outer margin of hind tibia strongly projecting medially and the outer margin of middle tibia with spines present, distinctly projecting apically. The lack of distinct elytral costae is unusual, and in this respect *arenata* resembles *medialis* Gordon and, to a lesser degree, *ecostata* Fall, but these two species do not resemble *arenata* in any other characteristics.

#### LITERATURE CITED

- GORDON, R. D. 1970. A review of the genus *Glareosis* in the United States and Canada (Coleoptera: Scarabaeidae). Trans. Amer. Entomol. Soc. 96:499-517.